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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/699,789 | 11/04/2003 | Gary A. Kneezel | 115005 | 4009 |

25944 7590 08/24/2005

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| EXAMINER |
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STEPHENS, JUANITA DIONNE

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| ART UNIT | PAPER NUMBER |
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2853

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/699,789

Applicant(s)

KNEEZEL, GARY A.

Examiner

Juanita D. Stephens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Election filed 6/8/2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/10/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 1-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/8/2005.
2. Applicant's election with traverse of Group I, claims 15-26 in the reply filed on 6/8/2005 is acknowledged. The traversal is on the ground(s) that the Applicant believes that the Office Action failed to provide a materially different process by which the devices may be made, the subject matter of claim 1-26 are sufficiently related that a thorough search for the subject matter of either Group I or Group II would encompass a search of the subject matter of the remaining claims and that a search and examination of the entire application could be made without serious burden. This is not found persuasive because restriction is proper when claims are found to be directed to independent and distinct inventions. The Examiners position is that, it would be a burden on the Examiner to examine claims which have acquired a separate status in the art as shown by their different classifications and because of their recognized divergent subject matter, thus, these claims are best examined in the class for which the method claims are directed. Furthermore, with respect to claims 15-26 the limitation that the structure is formed by dicing is not seen to be patentably limiting, determination of patentability is based on the product itself, therefore no patentably weight is given to the dicing method.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Campanelli (US 4,878,992).

Campanelli discloses a fluid ejector (print head 12) comprising: 1) channels formed in at least one of a first wafer(channel plate 31), a second wafer (heater plate 28) and zero, one or more intermediate layers (58 and 17) , 2) at least one cross-trench (24) formed in at least one of the first and second wafers at the zero, one or more intermediate layers that intersects the channels to form orifices for the channels (col 6, lns 42-47), wherein the combination of the first and second wafers on the zero, one or more intermediate layers form a wafer structure containing a plurality of fluid ejector devices (as shown in Figs. 3 and 5), 3) front faces formed for the fluid devices by at least dicing into the cross-trenches such that the orifices (nozzles 27) are offset from the front faces (orifices are offset from the front face of heater wafer 28, as shown in Figs, 5 and 6), 4) wherein the orifices are set back from the front face formed by dicing (col 6, lns 42-47), 5) wherein the orifices extend in front of the surface formed by dicing (as shown in Figs. 5 and 6), 6) wherein the cross-trench is formed by dicing (col 6, lns 42-

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47), 7) wherein front faces are formed for the fluid devices by dicing at least to a depth the does not extend to the orifices (as shown in Figs . 5 and 6), 8) a heater wafer (28), a polymer layer (thick film layer 58), a channel wafer (31) at least one cross trench (formed by floor 24) formed in at least one of the heater wafer (col 6, lns 42-47), the polymer layer, and the channel wafer, wherein the channel wafer is over the polymer layer and the polymer layer is over the heater wafer to form a bonded structure (as shown in Figs. 3 and 5), a front face formed by dicing at least into the at least one cross-trench of the bonded structure (col 6, lns 42-47), 9) wherein the channel is flared near the orifice (as shown in Fig. 5), and 10) wherein the channel is tapered near the orifice (as shown in Figs. 5 and 6).

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juanita D. Stephens whose telephone number is (571) 272-2153. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JUANITA D. STEPHENS
PRIMARY EXAMINER

Juanita D. Stephens
Primary Examiner
Art Unit 2853

JS
August 22, 2005